

**Texas Gas Transmission LLC
Texas Gas Transmission LLC - Houghton Compressor Station
Houghton, Bossier Parish, Louisiana
Agency Interest Number: 13703**

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Texas Gas Transmission LLC
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Houghton, Bossier Parish, Louisiana
Agency Interest Number: 13703
Activity Number: PER20070003
Proposed Permit Number: 0400-00024-V4**

I. APPLICANT

Company:

Texas Gas Transmission LLC - Houghton Compressor Station
PO Box 20008
Owensboro, Kentucky 42304-0008

Facility:

Texas Gas Transmission LLC
6172 Hwy 157 South
Houghton, Bossier Parish, Louisiana
Approximate UTM coordinates are 452.2 kilometers East and 3592.8 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

The Houghton Compressor Station utilizes two internal combustion engines with a maximum capacity of 8410 brake horsepower (bhp) and a turbine with a maximum capacity of 6311 bhp to compress imported natural gas and re-inject into a sales pipeline.

Texas Gas Transmission LLC - Houghton Compressor Station is a designated Part 70 source. The Part 70 permit which has been issued to this facility is as follows:

Permit No.	Unit or Source	Date Issued
0400-00024-V3	Houghton Compressor Station	5/24/2007

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III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on October 31, 2007 requesting a Part 70 operating permit renewal for the Houghton Compressor Station. Additional information dated December 3, 2007 was also submitted.

Project

Texas Gas Transmission has requested the following minor updates/changes to this permit.

- Correct the stack diameter for the Emergency Generator (AX03) from 27 inches to 10 inches.
- Include specific applicable requirements from 40 CFR 60 Subpart KKKK for Compressor Turbine #1 (TB01) as the rule was not final at the time of this permits previous modification.
- Update emissions
 - Emission update for Acetaldehyde (+0.01 tpy) is only due to rounding error in previous permit. Texas Gas Transmission, LLC is not proposing any emissions increase.

Proposed Permit

Permit 0400-00024-V4 will be the renewal of Part 70 operating permit 0400-00024-V3 for the Houghton Compressor Station.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	12.28	12.28	-
SO ₂	0.25	0.25	-
NO _x	169.63	169.63	-
CO	205.87	205.87	-
VOC *	52.11	52.11	-

*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Acetaldehyde	1.76	1.77	+0.01
Acrolein	1.76	1.76	-

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*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Benzene	0.44	0.44	-
Ethylbenzene	0.04	0.04	-
Formaldehyde	12.63	12.63	-
n-Hexane	0.10	0.10	-
Toluene	0.25	0.25	-
Xylene	0.07	0.07	-
Total	17.05	17.06	+0.01

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

See section XI table 2 in the permit.

Prevention of Significant Deterioration/Nonattainment Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does apply.

Streamlined Equipment Leak Monitoring Program

None

MACT Requirements

The Haughton Compressor Station is not subject to the Maximum Achievable Control Technology (MACT) standards.

Air Quality Analysis

Louisiana Toxic Air Pollutant (LTAP) dispersion modeling is performed for the applicable LTAP compounds with emissions above the Minimum Emission Rate. The screening modeling results predict the maximum ground level concentrations of toxic air pollutants are below the Ambient Air Standards (AAS).

Impact on air quality from the emissions of the proposed units will be below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property.

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Impact on air quality from the emissions of the proposed units will be below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

None

VI. PERIODIC MONITORING

All periodic monitoring is conducted in accordance with state and federal regulations. See the Specific Requirements Section of the proposed permit for monitoring requirements.

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VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air

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Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.